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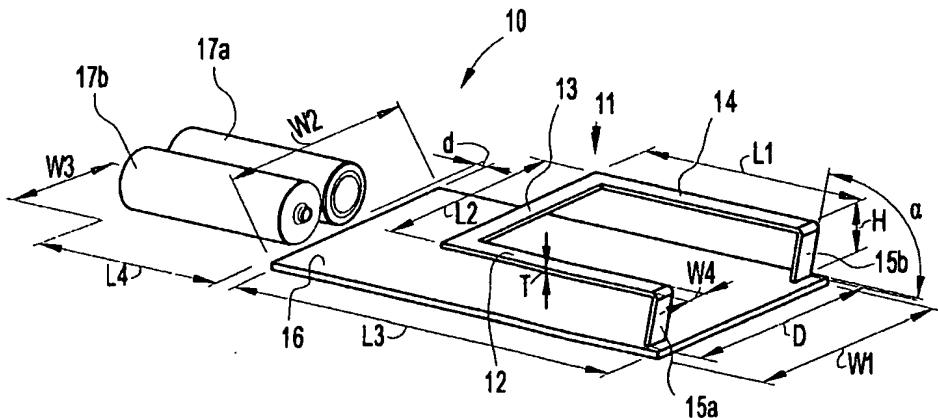
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(54) Title: WIDEBAND ANTENNA DEVICE WITH EXTENDED GROUND PLANE IN A PORTABLE DEVICE



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(57) Abstract: An antenna device for a portable device has an antenna loop (11) of conducting material to be connected to radio circuitry in the portable device. The antenna loop (11) is positioned opposite a ground plane of a PCB (16). Also, the antenna device also comprises at least one battery, which is positioned in the extension of a first side of the PCB (16), and acts as an extension of the ground plane of the PCB (16).

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01Q1/48 H01Q1/24																
According to International Patent Classification (IPC) or to both national classification and IPC																
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01Q																
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched																
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB																
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Category</th> <th style="text-align: left; padding: 2px;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="text-align: left; padding: 2px;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">X</td> <td style="padding: 2px;">US 5 020 136 A (PATSIOKAS STELIOS J ET AL) 28 May 1991 (1991-05-28) abstract; figures 2-3A column 3, line 27-65 column 4, line 3-18</td> <td style="padding: 2px;">1-13</td> </tr> <tr> <td style="padding: 2px;">Y</td> <td style="padding: 2px;">WO 01 76006 A (AVANTEGO AB ;BJOERKMAN TONY (SE); SJOEHOLM JAN (SE)) 11 October 2001 (2001-10-11) abstract; figures 2,3,6 page 5, line 21 -page 6, line 19</td> <td style="padding: 2px;">1-13</td> </tr> <tr> <td style="padding: 2px;">Y</td> <td style="padding: 2px;">US 6 266 019 B1 (HICKLE RANDY D ET AL) 24 July 2001 (2001-07-24) abstract; figures 7A-B column 8, line 10-31,40-47</td> <td style="padding: 2px;">1-13</td> </tr> <tr> <td style="padding: 2px;">A</td> <td style="padding: 2px;">-----</td> <td style="padding: 2px;">-----</td> </tr> </tbody> </table>		Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 5 020 136 A (PATSIOKAS STELIOS J ET AL) 28 May 1991 (1991-05-28) abstract; figures 2-3A column 3, line 27-65 column 4, line 3-18	1-13	Y	WO 01 76006 A (AVANTEGO AB ;BJOERKMAN TONY (SE); SJOEHOLM JAN (SE)) 11 October 2001 (2001-10-11) abstract; figures 2,3,6 page 5, line 21 -page 6, line 19	1-13	Y	US 6 266 019 B1 (HICKLE RANDY D ET AL) 24 July 2001 (2001-07-24) abstract; figures 7A-B column 8, line 10-31,40-47	1-13	A	-----	-----
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Information on patent family members

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